Capacity Building in the Context of the Comprehensive Nuclear-Test-Ban Treaty

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The Provisional Technical Secretariat (PTS) was established to prepare the monitoring regime which will be used to monitor compliance with the CTBT, which prohibits nuclear explosions in all environments. The monitoring regime consists of three main components: the International Monitoring System (IMS), the International Data Centre (IDC), and On-Site Inspection (OSI). The IMS consists of a global network of 321 monitoring facilities, which includes seismic, hydroacoustic, infrasound, and radionuclide stations. These stations are designated in the Treaty, are built by the PTS, and are owned and operated by the hosting country. One aspect of capacity building involves training station operators to operate and maintain their IMS stations.

Data from the IMS stations are sent to the IDC, where the data are processed and analyzed. The results of this work, as well as the raw data from the IMS stations, are made available to States Signatories. Work done in these countries is most commonly performed at a National Data Centre (NDC), which is designated by the country for this purpose. The Treaty specifies that it is up to the member States to decide if a treaty relevant event has taken place, and to call for follow up actions, e.g., an On-Site Inspection. The data and products made available by the IDC are used by member states to assess compliance with the Treaty. Another aspect of capacity building involves training staff in member states on acquiring, analyzing, and synthesizing data and products in fulfilling their Treaty obligations. These data may also be used for civil and scientific application such as Tsunami warning.

Capacity Building efforts include a wide range of training and workshop opportunities. Training courses include station operator training, which includes hands on training for the specific type of equipment installed at a station, as well as training on the reporting tools which are used to report station problems. Capacity building opportunities for NDCs include brief introductory course, as well as a longer, two week course, which focuses on accessing and analyzing data and products obtained from the IDC.

Recently a capacity building initiative has started which focuses on providing training, expert services, and equipment in developing countries. Initially the needs of a country are assessed, to see how the project can be tailored to the existing needs and infrastructure. After the equipment is installed, on-site training is provided on how to use data and products in a national context.